



SEQUENCE LISTING

#8

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AUG 28 2002

TECH CENTER 1600/2900

<110> Lerner, Richard A  
Sorge, Joseph A  
Winter, Gregory P  
Riechman, Lutz

<120> A new method for tapping the immunological repertoire

<130> 213839-00023

<140> 09/726,649

<141> 2000-11-28

<160> 121

<170> PatentIn version 3.1

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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
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Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
85 90 95

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Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
 85 90 95

Tyr Cys Ala Arg Asp Tyr Tyr Gly Ser Ser Tyr Trp Tyr Phe Asp Val  
 100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
 85 90 95

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Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe

20

25

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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
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Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Phe  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Phe Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
 85 90 95

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 100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Leu Ser Gly Phe Leu Phe Ser Asp Phe  
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Tyr Met Glu Trp Val Arg Gln Thr Pro Gly Lys Arg Leu Glu Trp Ile  
35 40 45

Ala Ala Ser Arg Asn Lys Val Tyr Asp Tyr Thr Thr Glu Tyr Ser Ala  
50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
85 90 95

Tyr Cys Ala Arg Asp Ala Tyr Tyr Gly Ser Tyr Trp Tyr Phe Asp Val  
100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Ala Phe  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
50 55 60

Ser Val Lys Gly Arg Phe Phe Val Ser Arg Asp Thr Ser Gln Ser Ile  
65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
85 90 95

Tyr Cys Ala Arg Asp Val Tyr Tyr Gly Tyr Asp Trp Tyr Phe Asp Val  
100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Ile Thr Phe Ser Asp Phe  
20 25 30

Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
35 40 45

Ala Ala Ser Arg Asn Lys Ala Ser Asp Tyr Thr Thr Glu Tyr Ser Ala  
50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
85 90 95

Tyr Cys Ala Arg Asp  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Ile Thr Phe Ser Asp Phe  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
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Leu Tyr Leu Gln Met Asn Ala Leu  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
 85 90 95

Tyr Cys Ala Arg Asp Tyr Tyr Gly Ser Ser Tyr Trp Tyr Phe Asp Val  
 100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
 115 120

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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
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Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
 85 90 95

Tyr Cys Ala Arg Asp Tyr Tyr Gly Ser Ser Tyr Trp Tyr Phe Asp Val  
 100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
 20 25 30

Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
85 90 95

Tyr Cys Ala Arg Asp Tyr Tyr Gly Ser Ser Tyr Trp Tyr Phe Asp Val  
100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
115 120

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1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
20 25 30

Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
85 90 95

Tyr Cys Ala Arg Asp Tyr Tyr Gly Ser Ser Tyr Trp Tyr Phe Asp Val  
100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
 20 25 30

Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
 85 90 95

Tyr Cys Ala Arg Asp Tyr Tyr Gly Ser Asn Tyr Trp Tyr Phe Asp Val  
 100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
20 25 30

Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
35 40 45

Ala Ala Ser Arg Asn Lys Gly Asn Lys Tyr Thr Thr Glu Tyr Ser Ala  
50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
85 90 95

Tyr Cys Ala Arg Asn Tyr Tyr Gly Ser Thr Tyr Trp Tyr Phe Asp Val  
100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
115 120

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Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Ser Asp Phe  
20 25 30

Tyr Met Glu Trp Val Arg Gln Pro Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Phe Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
 85 90 95

Tyr Cys Ala Arg Asn Tyr Tyr Lys Tyr Asp Leu Trp Tyr Val Asp Val  
 100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
 115 120

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Tyr Met Glu Trp Val Arg Gln Ser Pro Gly Lys Arg Leu Glu Trp Ile  
 35 40 45

Ala Ala Ser Arg Asn Lys Ala Asn Asp Tyr Thr Thr Glu Tyr Ser Ala  
 50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Ile  
 65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Ile Tyr  
85 90 95

Tyr Cys Ala Arg Asp Gly Asp Tyr Gly Ser Ser Tyr Trp Tyr Phe Asp  
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Val Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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Tyr Met Glu Trp Val Arg Gln Thr Pro Gly Lys Arg Leu Glu Trp Ile  
35 40 45

Ala Ala Ser Arg Ser Lys Ala His Asp Tyr Thr Arg Glu Tyr Ser Ala  
50 55 60

Ser Val Lys Gly Arg Phe Ile Val Ser Arg Asp Thr Ser Gln Ser Val  
65 70 75 80

Leu Tyr Leu Gln Met Asn Ala Leu Arg Ala Glu Asp Thr Ala Thr Tyr  
85 90 95

Tyr Cys Thr Arg Asp Ala Asp Tyr Gly Asn Ser Tyr Phe Gly Tyr Phe  
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Asp Val Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser  
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ctagactagt taccctgacg acgttcgga ctacggttct taatagaatt cg 172

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<212> DNA  
<213> Unknown

<220>  
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<400> 39  
ggccgcaaatt tctatttcaa ggagacagtc ataatgaaat acctattgcc tacggcagcc 60  
gctggattgt tattactcgc tgcccaacca gccatggccc aggtgaaact gctcgagatt 120  
ctagactagt taatag 136

<210> 40  
<211> 131  
<212> DNA  
<213> Unknown

<220>  
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<400> 40  
tgaattctaa actagtcgcc aaggagacag tcataatgaa atacctattg cctacggcag 60  
ccgctggatt gttattactc gctgcccac cagccatggc cgagctcgtc agttctagag 120  
ttaagcggcc g 131

<210> 41  
<211> 131  
<212> DNA  
<213> Unknown

<220>

<223> Synthetic

<400> 41

tgaattctaa actagtcgcc aaggagacag tcataatgaa atacctattg cctacggcag ... 60

ccgctggatt gttattactc gctgccaac cagccatggc cgagctcgtc agttctagag 120

ttaagcggcc g 131

<210> 42

<211> 22

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 42

aggtccagct gctcgagtct gg 22

<210> 43

<211> 22

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 43

aggtccagct gctcgagtca gg 22

<210> 44

<211> 22

<212> DNA

<213> Unknown

<220>

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<400> 44

aggtccagct tctcgagtct gg 22

<210> 45

<211> 22

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 45

aggtccagct tctcgagtca gg 22

<210> 46  
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<220>  
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<400> 46  
aggtccaact gctcgagtct gg 22

<210> 47  
<211> 22  
<212> DNA  
<213> Unknown

<220>  
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<400> 47  
aggtccaact gctcgagtca gg 22

<210> 48  
<211> 22  
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<220>  
<223> Synthetic

<400> 48  
aggtccaact tctcgagtct gg 22

<210> 49  
<211> 22  
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<220>  
<223> Synthetic

<400> 49  
aggtccaact tctcgagtca gg 22

<210> 50  
<211> 20  
<212> DNA  
<213> Unknown

<220>

<223> 5' degenerate primer containing inosine at 4 degenerate positions

<220>

<221> misc\_feature

<222> (1)..(20)

<223> n=inosine

<400> 50

aggtnnanct nctcgagtct

20

<210> 51

<211> 20

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<220>

<221> misc\_feature

<222> (1)..(20)

<223> n=inosine

<400> 51

aggtnnanct nctcgagtca

20

<210> 52

<211> 19

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 52

gcccaaggat gtgctcacc

19

<210> 53

<211> 39

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 53

ctattagaat tcaacggtaa cagtgggtgcc ttggcccca

39

<210> 54

<211> 39

<212> DNA



<213> Unknown

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<223> Synthetic

<400> 54

ctattaacta gtaacggtaa cagtgggtgcc ttggcccca

39

<210> 55

<211> 19

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 55

ctcagtatgg tggttgtgc

19

<210> 56

<211> 26

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 56

gctactagtt ttgatttcca ccttgg

26

<210> 57

<211> 23

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 57

cagccatggc cgacatccag atg

23

<210> 58

<211> 30

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 58

aattttacta gtcaccttgg tgctgctggc

30

<210> 59  
<211> 39  
<212> DNA  
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<220>

<223> Synthetic

<400> 59  
tatgcaacta gtacaaccac aatccctggg cacaatttt

39

<210> 60  
<211> 32  
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<220>

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<400> 60  
ccagttccga gctcgttggtg actcaggaat ct

32

<210> 61  
<211> 32  
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<220>

<223> Synthetic

<400> 61  
ccagttccga gctcgtgttg acgcagccgc cc

32

<210> 62  
<211> 32  
<212> DNA  
<213> Unknown

<220>

<223> Synthetic

<400> 62  
ccagttccga gctcgtgctc acccagtctc ca

32

<210> 63  
<211> 32  
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<220>

<223> Synthetic

<400> 63

ccagttccga gctccagatg acccagtctc ca 32

<210> 64

<211> 32

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 64

ccagatgtga gctcgtgatg acccagactc ca 32

<210> 65

<211> 32

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 65

ccagatgtga gctcgtcatg acccagtctc ca 32

<210> 66

<211> 32

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 66

ccagatgtga gctcgtgata acccaggatg aa 32

<210> 67

<211> 32

<212> DNA

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<400> 67

gcagcattct agagtttcag ctccagcttg cc 32

<210> 68

<211> 33

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 68  
ccgccgtcta gaacactcat tcctgttgaa gct 33

<210> 69  
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<400> 69  
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<210> 70  
<211> 32  
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<220>  
<223> Synthetic

<400> 70  
ccagttccga gctcgtgatg acacagtctc ca 32

<210> 71  
<211> 34  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 71  
gcgccgtcta gaattaacac tcattcctgt tgaa 34

<210> 72  
<211> 38  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 72  
ctattaacta gtaacggtaa cagtgggtgcc ttgcccc 38

<210> 73  
<211> 30  
<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 73

aggcttacta gtacaatccc tgggcacaat

30

<210> 74

<211> 29

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 74

gccgctctag aacactcatt cctgttgaa

29

<210> 75

<211> 22

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<220>

<221> misc\_feature

<222> (1)..(22)

<223> n=inosine

<400> 75

aggtnnanct nctcgagtct gc

22

<210> 76

<211> 22

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<220>

<221> misc\_feature

<222> (1)..(22)

<223> n=inosine

<400> 76

aggtnnanct nctcgagtca gc

22

<210> 77  
<211> 35  
<212> DNA  
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<220>  
<223> Synthetic

<400> 77  
gtgccagatg tgagctcgtg atgacccagt ctcca' 35

<210> 78  
<211> 34  
<212> DNA  
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<220>  
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<400> 78  
tccttctaga ttactaacac tctcccctgt tgaa 34

<210> 79  
<211> 31  
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<213> Unknown

<220>  
<223> Synthetic

<400> 79  
gcattctaga ctattaacat tctgtagggg c 31

<210> 80  
<211> 37  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 80  
ctgcacaggg tcctgggccg agctcgtggt gactcag 37

<210> 81  
<211> 22  
<212> DNA  
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<220>  
<223> Synthetic

<220>

<221> misc\_feature  
<222> (1)..(22)  
<223> n=inosine

<400> 81  
agntgcannt gctcgagtct gg 22

<210> 82  
<211> 43  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 82  
gtgggcatgt gtgagttgtg tcactagttg gggttttgag ctc 43

<210> 83  
<211> 30  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 83  
cggactagta caagatttgg gctctgcttt 30

<210> 84  
<211> 22  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<220>  
<221> misc\_feature  
<222> (1)..(22)  
<223> s=C or G, m= C or A, r= G or T, k= G or T, w= T or A

<400> 84  
aggtsmarct kctcgagtcw gg 22

<210> 85  
<211> 32  
<212> DNA  
<213> Unknown

<220>

<223> Synthetic

<400> 85  
ggccgcgcaaat tctattttcaa ggagacagtc at 32

<210> 86

<211> 36

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 86  
aatgaaatac ctattgccta cggcagccgc tggatt 36

<210> 87

<211> 31

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 87  
gttattactc gctgcccaac cagccatggc c 31

<210> 88

<211> 38

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 88  
aggtgaaact gctcgagaat tctagactag gttaatag 38

<210> 89

<211> 30

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 89  
tcgactatta actagtctag aattctcgag 30

<210> 90

<211> 29

<212> DNA



<213> Unknown

<220>

<223> Synthetic

<400> 90

cagtttcacc tgggcacatgg ctgggtggg

29

<210> 91

<211> 40

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 91

cagcgagtaa taacaatcca gcggctgccg taggcaatag

40

<210> 92

<211> 38

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 92

gtatttcatt atgactgtct ccttgaaata gaatttgc

38

<210> 93

<211> 40

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 93

aggtgaaact gctcgagatt tctagactag ttacccgtag

40

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<211> 33

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 94

gacgttcagg actacggttc ttaatagaat tcg

33

<210> 95  
<211> 28  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 95  
tcgacgaatt ctattaagaa ccgtagtc 28

<210> 96  
<211> 38  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 96  
cggaacgtcg tacgggtaac tagtctagaa atctcgag 38

<210> 97  
<211> 34  
<212> DNA  
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<220>  
<223> Synthetic

<400> 97  
tgaattctaa actagtcgcc aaggagacag tcatt 34

<210> 98  
<211> 30  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 98  
gagctcgtca gttctagagt taagcggccg 30

<210> 99  
<211> 48  
<212> DNA  
<213> Unknown

<220>  
<223> Synthetic

<400> 99

gtatttcatt atgactgtct ccttggcgac tagtttagaa ttcaagct 48

<210> 100

<211> 40

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 100

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<210> 101

<211> 27

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 101

tgacgagctc ggccatggct ggttggg 27

<210> 102

<211> 24

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 102

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<210> 103

<211> 28

<212> DNA

<213> Unknown

<220>

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<400> 103

aataagcttg atctatcagt aatcgacc 28

<210> 104

<211> 31

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 104

attagatctg aattctgacg tccgttatca g

31

~~<210> 105~~

<211> 56

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 105

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56

<210> 106

<211> 51

<212> DNA

<213> Unknown

<220>

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<400> 106

ccgagcggcc aaagggagca gactctaaat ctgccgtcat cgacttcgaa g

51

<210> 107

<211> 42

<212> DNA

<213> Unknown

<220>

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<400> 107

gttcgaatcc ttccccacc accatcactt tcaaaagtcc ga

42

<210> 108

<211> 56

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 108

ctagtcggac ttttgaaagt gatggtggtg ggggaaggat tcgaaccttc gaagtc

56

<210> 109

<211> 52

<212> DNA

<213> Unknown

<220>

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<220>

<221> misc\_feature

<222> (1)..(52)

<223> r= G or A

<400> 109

gatgacggca gatttagagt ctgctccctr ttggccgctc gggaacccca cc

52

<210> 110

<211> 42

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 110

acaggtaatg cttttactgg cctgctccct tatcggaag cg

42

<210> 111

<211> 9

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 111

tcgagcgcc

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<210> 112

<211> 9

<212> DNA

<213> Unknown

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<400> 112

gatcggcgc

9

<210> 113

<211> 9

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 113  
ctagggcct

9

<210> 114

<211> 9

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 114  
ctagaggcc

9

<210> 115

<211> 5

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 115  
cgccc

5

<210> 116

<211> 13

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 116  
gatcgggcga gct

13

<210> 117

<211> 41

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 117  
ctagttaccc gtacgacgtt ccggactacg cttcttaata g

41

<210> 118

<211> 40

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 118

aattctatta agaagcgtag tccggāacgt cgacgggtaa

40

<210> 119

<211> 199

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 119

tcgagcgccg atccgcttcc cgataaggga gcaggccagt aaaagcatta cctgtggtgg 60

ggttcccag cggccaaagg gacgagactc taaatctgcc gtcacgact tcgaagggtc 120

gaatccttcc cccaccacca tcactttcaa aagtccgact agttaccggt acgacgttcc 180

ggactacgct tcttaatag 199

<210> 120

<211> 162

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 120

cgccccgatcc gcttcccgat aaggagcag gccagtaaaa gcattacctg tgggtggggtt 60

cccagcggcc aaaggagca gactctaaat ctgccgtcat cgacttcgaa gggtcgaatc 120

cttccccac caccatcact ttcaaaagtc cgactagggc ct 162

<210> 121

<211> 32

<212> DNA

<213> Unknown

<220>

<223> Synthetic

<400> 121

ccagatgtga gctcgtgata acccaggatg aa

32

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